## The following site is being submitted for inclusion into the GIS registry:

This is a:	New Submittal
BRRTS ID (no dashes):	0371100470
Comm # (no dashes):	54963103010
County:	Winnebago
Region:	Commerce
Site name:	Automotive Specialists
Street Address:	310 N Webster Ave
City:	Omro
Closure Date	2001-05-23
Closure Conditions:	met
Offsite contamination?	No
Right-of-way contamination?	No
Contaminated media:	Groundwater
GPS Coordinates (meters in the	e <b>WTM91</b> projection)
Easting (X):	620616.115236802
Northing (Y):	397221.221804858
Submitted by:	Cheryl Nelson

#### Checklist

$\boxtimes$	Final Closure Letter
$\boxtimes$	Copy of recorded deed Instrument for any property with GW > NR140 ES
$\boxtimes$	General Location Map
$\boxtimes$	Detailed Location Map showing property boundaries, buildings, etc for properties with GW >NR140 ES
$\boxtimes$	Latest Map(s) showing extent or outline of current GW plume
$\boxtimes$	GW flow direction
$\boxtimes$	MW(s) and/or potable wells
$\boxtimes$	Latest Table of GW results



ENVIRONMENTAL & REGULATORY SERVICES 2129 Jackson Street Oshkosh, Wisconsin 54901 (920) 424-0025 TDD #: (608) 264-8777 www.commerce.state.wi.us

Scott McCallum, Governor Brenda J. Blanchard, Secretary

May 23, 2001

Mr. Gerald Hitchcock 310 N. Webster Avenue Omro, WI 54963

Subject:

Case Closure - Automotive Specialists Site

310 N. Webster Ave., Omro

COMMERCE #54963-1030-10 DNR #03-71-100470

Dear Mr. Hitchcock:

I have reviewed the information submitted by your consultant to satisfy the conditions of closure set in the Conditional Closure letter dated November 28, 2000. The department has determined that all the conditions of closure have been met. **The site will now be listed as "closed"** on the Department of Commerce/Department of Natural Resources database.

Thank you for your efforts in protecting the environmental resources of the State of Wisconsin.

If you have any questions, please contact me at (920)424-0025.

Sincerely,

Thomas Verstegen

Department of Commerce

PECFA-Site Review Section

CC PECFA File – pf\pecfa\549\54963\103010\close-final.doc

Mr. Martin Johnson – Environmental Assessments

Document Number

## NOTICE OF CONTAMINATION TO PROPERTY

REGISTER'S OFFICE WINNEBAGO COUNTY, WI RECORDED ON

111289A

12-01-2000 10:25 AM

SUSAN WINNINGHOFF REGISTER OF DEEDS

RECORDING FEE 14.00 TRANSFER FEE # OF PAGES 3

\_

Legal Description of the Property: In re:

(as it appears on the most recent deed)

Recording Area

Name and Return Address,
Gerald F. Hitchcock
4903 (bunty Rood E
Oshkosh WI 54904

STATE OF WISCONSIN )
) ss
COUNTY OF )

Parcel Identification Number (PIN)

Section 1.

Kathleen L. Halack is the owner of the above-described property.

Section 2. One or more petroleum discharges have occurred at this property. Benzene and Naphthalene contaminated groundwater above NR 140 enforcement standards and soils above NR 720 residual contaminant levels of the Wisconsin Administrative Code exist(s) on this property.

Section 3. The owner hereby declares that all of the property described above is held and shall be held, conveyed or encumbered, leased, rented, used, occupied and improved subject to the following limitations and/or restrictions:

Anyone who proposes to construct or reconstruct a well on this property is required to contact the Department of Natural Resources' Bureau of Drinking Water and Groundwater, or its successor agency, to determine what specific prohibitions or requirements are applicable, prior to constructing or reconstructing a well on this property. No well may be constructed or reconstructed on this property unless applicable requirements are met.

Also,

Residual petroleum contaminated soil remains on this site. Natural attenuation is the approved remedial alternative for this site. If contaminated soil is excavated in the future, it may be considered a solid waste and will need to be disposed in accordance with all applicable laws.

Any person who is or becomes owner of the property described above may request that the Wisconsin Department of Commerce, or its successor, issue a determination that the restrictions set forth in this covenant are no longer required. That property owner shall provide any and all necessary information to the Department in order for the Department to be able to make a determination. Upon receipt of such a request, the Department shall determine whether or not the restrictions contained herein can be extinguished. Conditions under which a restriction may be extinguished will be

determined in accordance with the site specific standards, rules and laws for this property. If the Department determines that the restrictions can be extinguished, an affidavit, with a copy of the Department's written determination, may be recorded to give notice that this restriction, or portions of this restriction are no longer binding. Any restriction placed upon this property shall not be extinguished without the Department's written determination.

By signing this document, [he/she] acknowledges that [he/she] is duly authorized to sign this document on behalf of

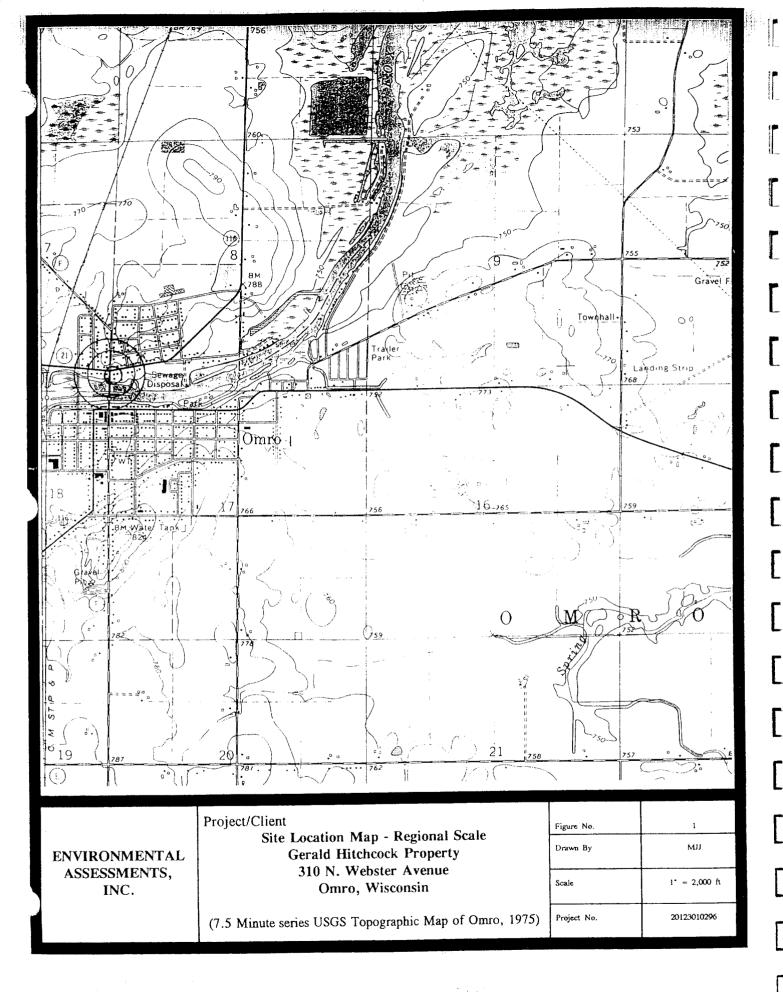
Signature: Kathlun & Khtchouch

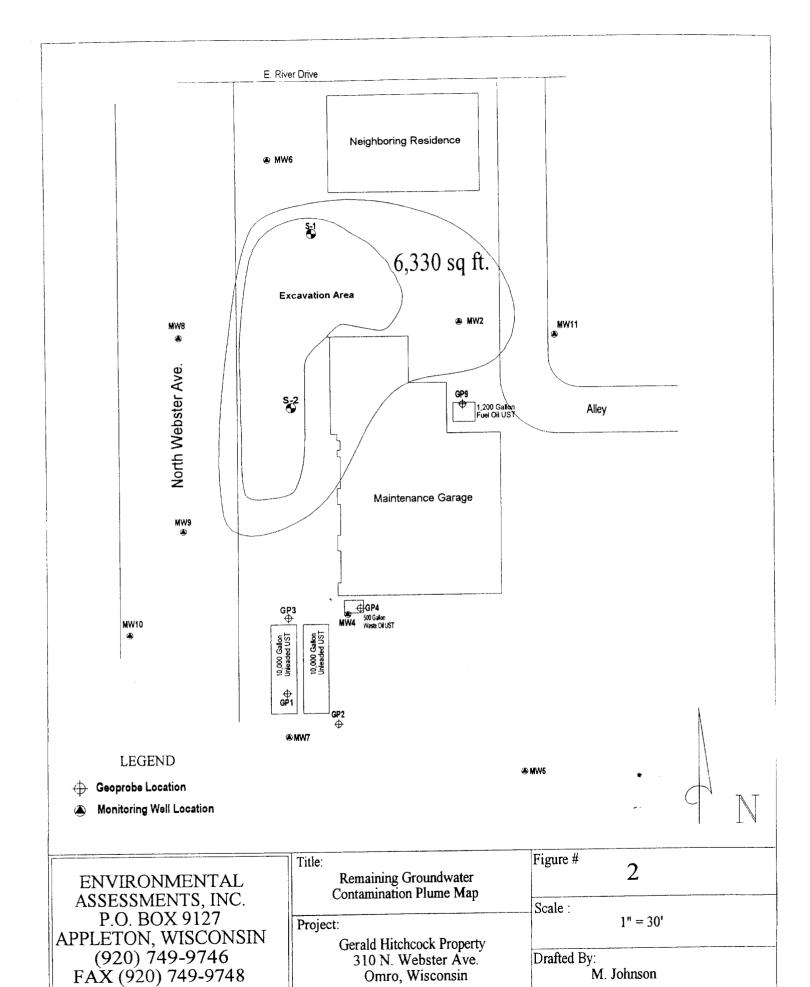
Title: Owner

Subscribed and sworn to before me this 15+ day of December 200

My commission expres 7-01-01

This document was drafted by the Wisconsin Department of Commerce.





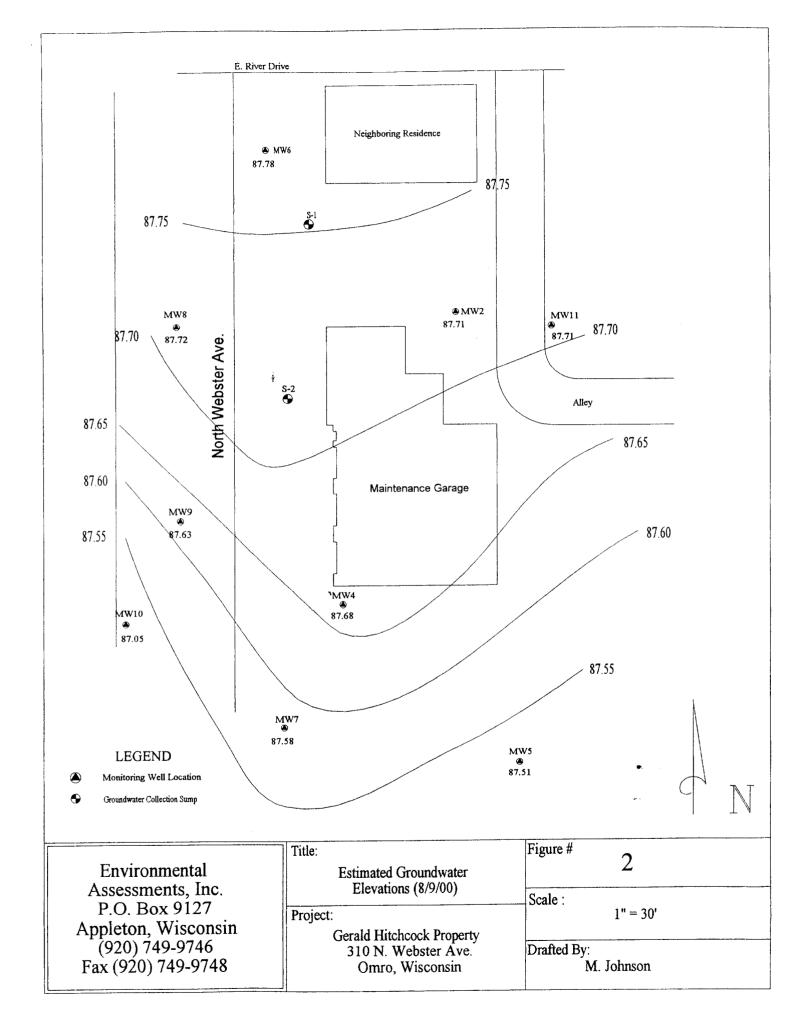


Table I Gerald Hitchcock Property Groundwater Elevations Table

	Grade	Casing	10/01/96	10/18/96	04/23/97	26/80/60	86/08/80	06/11/98	09/16/98	66/91/60	12/29/99	04/21/2000 08/09/2000	08/09/2000
MW1	96.41	20.96	29.68	87.82	60.68	88.13	88.39	88.46	87.59	*	*	*	*
MW2	95.62	95.35	69.78	87.57	88.25	87.82	87.57	88.00	87.31	87.75	87.03	87.50	87.71
MW3	69.66	95.49	89.78	87.56	88.24	87.82	87.57	88.00	87.31	*	*	*	*
MW4	95.24	94.83	19.78	87.50	88.18	87.75	87.52	87.93	87.29	87.70	86.99	88.16	87.68
MW5	99.88	91.49	87.52	87.43	88.01	87.59	87.36	87.77	87.12	87.53	86.84	87.36	87.51
MW6	97.38	96.76	87.86	87.63	88.27	87.88	87.64	88.07	87.38	87.85	87.09	87.56	87.78
MW7	94.19	93.78	87.27	87.24	87.79	99.78	87.46	87.79	87.44	87.63	86.91	87.48	87.58
MW8	95.90	69.56	*	*	88.27	87.84	87.62	88.01	87.32	87.77	87.02	87.50	87.72
MM9	95.26	94.74	*	*	88.15	87.73	87.57	87.94	87.30	87.71	86.98	87.49	87.63
MW10	94.99	94.52	*	*	87.63	87.05	87.17	87.32	87.09	87.21	86.48	87.64	87.05
MW11	95.50	95.16	*	*	88.24	87.80	87.56	87.98	87.30	87.75	87.01	87.50	87.71
PZ1	96.49	60'96	87.71	79.22	71.40	87.84	87.60	88.01	87.33	*	*	*	*
S-1	97.17	96.26	*	*	*	*	*	*	*	87.71	86.94	87.45	87.38
S-2	95.56	94.77	*	*	*	*	*	*	*	89.78	86.91	87.42	86.43

Notes: \*\* = Data not available

# Table IV Gerald Hitchcock Property Summary of Field Inorganic Parameters

Date	Temperature	Dissolved	Nitrate	Ferrous Iron	Sulfate	pН
<u> </u>	Celsius	Oxygen (mg/L)	mg/L_	mg/L	mg/L	
		0.17	0.0	1 05 1	> 100	6.7
						6.7
						6.8
			3.3	3.7	90	0.6
Well removed	during soil exc	cavation activities				
	T	0.10	**	1.0	7.0	7.1
						7.0
						**
						7.2
						7.1
						7.2
						**
08/09/2000	**	1		11		1
02/20/02	9.0	0.25	5.0	60	5.0	6.8
			**	**	**	6.7
	<del></del>		**	**	**	**
			L			J
well removed	auring son ex	cavation activities				
02/20/08	7.0	1.05	**	57	11.0	6.9
				**	**	7.0
					**	**
		<del></del>	<del></del>		38	7.2
	<del></del>					6.7
						7.1
				**	**	**
1 08/09/2000		1		<u> </u>	<u>,</u>	<u> </u>
02/20/00	T 0.3	0.42	10	1.6	53	7.0
					**	7.0
					**	**
						7.1
	· · · · · · · · · · · · · · · · · · ·					7.1
			<del></del>			6.9
						7.2
1 08/09/2000	15.2	U.32	1	1.4	1 00	1.2
02/20/09	1 00	0.78	1 2	< 0.25	48	7.4
						7.4
			<del></del>			7.4
	·					7.3
						7.3
		<del> </del>				7.4
						7.4
1 08/09/2000	13.8	1.04	1 1.1			1
03/20/09	6.0	0.42	74	0.9	90	7.2
		<del></del>	<del></del>			7.2
	<del></del>		**			7.2
						7.2
			<del></del>			7.1
			<del></del>			7.0
1 04/21/2000	0,4	I V.U4	1 4.7	4		
	03/30/98 06/17/98 09/16/98 Well removed 03/30/98 06/17/98 09/16/99 12/29/99 04/21/2000 08/09/2000 03/30/98 06/17/98 09/16/98	O3/30/98         6.2           06/17/98         12.5           09/16/98         16.1           Well removed during soil exc           03/30/98         7.6           06/17/98         12.0           09/16/98         15.6           09/16/99         15.7           12/29/99         11.6           04/21/2000         8.6           08/09/2000         **           03/30/98         8.0           06/17/98         12.2           09/16/98         16.9           Well removed during soil ex           03/30/98         7.8           06/17/98         13.3           09/16/99         15.0           12/29/99         13.2           04/21/2000         8.2           08/09/2000         **           03/30/98         8.3           06/17/98         10.9           09/16/99         14.4           12/29/99         10.7           04/21/2000         8.5           08/09/2000         15.2           03/30/98         8.8           06/17/98         13.7           09/16/99         14.4           12/29/99	Celsius         Oxygen (mg/L)           03/30/98         6.2         0.16           06/17/98         12.5         0.23           09/16/98         16.1         0.18           Well removed during soil excavation activities           03/30/98         7.6         0.19           06/17/98         12.0         0.23           09/16/98         15.6         0.14           09/16/98         15.6         0.14           09/16/99         15.7         0.20           12/29/99         11.6         0.68           04/21/2000         8.6         0.32           08/09/2000         **         **           03/30/98         8.0         0.25           06/17/98         12.2         0.25           09/16/98         16.9         0.33           Well removed during soil excavation activities           03/30/98         7.8         1.05           06/17/98         13.3         0.24           09/16/99         15.0         0.18           12/29/99         13.2         0.55           04/21/2000         8.2         9.58           08/09/2000         **         **     Oscidental sequenc	O3/30/98         6.2         0.16         8.8           06/17/98         12.5         0.23         5.9           09/16/98         16.1         0.18         3.5           Well removed during soil excavation activities           03/30/98         7.6         0.19         **           06/17/98         12.0         0.23         **           09/16/98         15.6         0.14         **           09/16/99         15.7         0.20         0.9           12/29/99         11.6         0.68         0.3           04/21/2000         8.6         0.32         2.3           08/09/2000         **         **         **           03/30/98         8.0         0.25         5.0           06/17/98         12.2         0.25         **           09/16/98         16.9         0.33         **           Well removed during soil excavation activities         **           03/30/98         7.8         1.05         **           09/16/98         16.1         0.23         **           09/16/98         16.1         0.23         **           09/16/99         15.0         0.18         <	Celsius   Oxygen (mg/L)   mg/L   mg/L	O3/30/98

MW8							
TAT AA Q	03/30/98	8.5	0.30	**	3.0	10.0	6.7
	06/17/98	13.4	0.95	**	2.6	27	6.6
	09/16/98	17.7	0.38	**	1.0	38	6.9
	09/16/99	16.6	0.82	**	1.4	35	6.9
	12/29/99	13.6	1.14	0.3	0.9	33	7.0
	04/21/2000	9.1	0.64	0.2	1.9	32	6.7
	08/09/2000	15.3	0.68	**	1.0	34	7.1
MW9	1 00/07/2000 [	13.5	0.00				
101.44.3	03/30/98	9.2	0.24	**	1.0	32	7.2
	06/17/98	12.1	0.29	**	**	**	7.2
	09/16/98	15.4	0.19	**	**	**	**
	09/16/99	15.2	0.44	1.1	1.0	41	7.3
		13.4	0.70	3.3	1.0	41	7.3
	12/29/99	9.8	0.70	1.7	1.3	44	7.3
	04/21/2000	9.8 **	**	**	**	**	**
NOVIO	08/09/2000				L	<u> </u>	
MW10	03/30/98	8.1	0.33	**	1.7	18	7.0
		12.6	0.23	**	**	**	7.0
	06/17/98		0.18	**	**	**	**
	09/16/98	16.5	0.18	0.8	2.6	28	7.2
	09/16/99	15.0	0.77	2.3	2.6	28	7.0
	12/29/99	12.9	0.45	2.4	3.2	26	7.0
	04/21/2000	9.1	V.45 **	**	**	**	**
) CIVII 1	08/09/2000				L	L	L.,
MWII	03/30/98	7.5	6.93	0.5	0.3	80	7.1
	06/17/98	12.5	5.64	2.7	0.3	87	7.0
	09/16/98	16.9	4.04	2.8	< 0.25	72	7.0
	09/16/99	15.9	3.23	1.1	0.7	49	7.0
	12/29/99	12.2	3.84	**	0.9	45	7.2
		8.7	4.26	4.9	< 0.25	53	7.2
	04/21/2000	14.8	4.30	**	0.8	52	7.2
D/71	08/09/2000	14.8	4.30		0.0	1 32	L
PZ1	02/20/09	7.9	0.41	1.9	0.8	45	7.4
	03/30/98	11.7	6.30	0.9	1,2	71	7.2
	06/17/98	14.9	1.40	2.0	0.9	52	7.4
	09/16/98		<u> </u>		1	1	<u> </u>
	Piezometer rem	iovea auring s	soil excavation ac	uvities			
S-1	00/16/00	160	0.45	1.5	< 0.25	70	7.1
	09/16/99	16.8	0.45	<del></del>	0.7	70	7.1
	12/29/99	12.0	1.54	2.4	1.8	22	6.9
	04/21/2000	8.9	2.70	3.8	0.3	33	7.4
2.2	08/09/2000	15.1	2.73	1.0	0.3	1 33	1
S-2	00/15/20	17.6	0.50	1 12	0.4	42	7,2
	09/16/99	17.6	0.50	1.3	0.4	62	7.2
	12/29/99	12.2	0.62	3.0	1.1		7.2
	04/21/2000	8.5	2.08	3.9	0.7	62 ** *	**
	08/09/2000	**	**		I TT	L	1

### \*\* Data not available or not collected

Upgradient well = MW6 Inner Plume well = S-1 Downgradient Wells = MW5, MW7 & MW10 Calculations for determining the assimilative capacity of the groundwater environment are presented below<sup>4</sup>.

	Oxygen	Nitrate	Sulfate	Iron
Average BTEX degraded per mg/L of electron donor/acceptor produced! "C"	0.32	0.21	0.21	0.05
Measured Background Concentration (MW6 - 04/21/00)	1.01	4.6	37	0.4
Measured Inner Plume Concentration (S-1 - 04/21/00)	2.7	3.8	22	1.8
Assimilative Capacity Potential (mg/L)	-0.5408	0.168	3.15	-0.07
Total calculated mg/L of BTEX in the groundwater				

Assimilative capacity is determined by using the following equation:

$$BTEX_{bio"x"} = "C"(x_{back}-x_{measur})$$

 $BTEX_{bio''x''} = BTEX$  Assimilative Capacity Potential of measured electron acceptor

"C" = mg/L of BTEX degraded per electron acceptor used/produced  $x_{back}$  = mg/L of electron acceptor/donor measured background levels

 $x_{measure} = mg/L$  of electron acceptor/donor in inner plume monitoring point

Based on this information, the assimilative capacity of the groundwater appears to be sufficient for the natural attenuation of the estimated remaining contaminants. EA believes that the assimilative capacity is sufficient for the bioremediation of the remaining contaminants within a reasonable period of time. The most likely pathway for degradation of the greatest amount of BTEX contamination appears to be anaerobic biodegradation via sulfate reduction followed by denitrfication. Iron reduction and arobic repiration do not appear to be significant factors in the natural attenuation at this site.